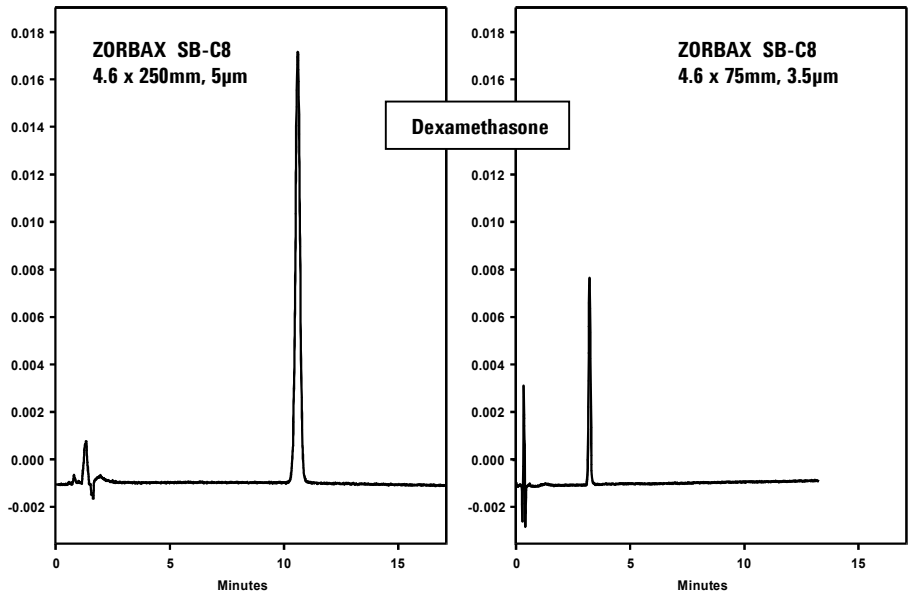
# USP Method
## Rapid Analysis of Dexamethasone

Application

Pharmaceutical

Robert Ricker

Dexamethasone is a corticosteroid used for effective relief of symptoms in a wide variety of inflammatory and allergic disorders and is an effective immunosuppressant in some benign and malignant disorders. Dexamethasone is also used in the animal industry as an anti-inflammatory drug for indications similar to those found in humans.




**Conditions:**
**ZORBAX SB-C8 (4.6 x 250mm, 5µm; 4.6 x 75 mm, 3.5µm) (Agilent P/N: 880975-906, 866953-906)**
**Mobile Phase: A=water, B=ACN; Isocratic 30% B**
**Injection: 10µL and 5µL, 2 mL/min, Ambient, Detect. UV(254 nm)**

### *Highlights*

- *Analysis time is reduced by 70%, and solvent consumption is subsequently reduced by choosing a ZORBAX Rapid-Resolution column configuration for this analysis.*
- *Improvement in the overall performance can easily be achieved by selecting an alternative column configuration. The USP method states that the HPLC is "typically ... fitted with a 4 mm x 25 cm column containing packing L7". This allows some flexibilty in column choice since column dimension is not stated as a critical parameter.*
- *Rapid analysis and quantitation is easily achieved by using shorter columns (75 mm) containing smaller particle-size packings (3.5 µm).*

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